

June 9, 2008

Diana Mason
State of Utah
Department of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: <u>Directional Drilling R649-3-11</u>

NBU 1022-24B1DS

Surface: NWNE Sec 24-T10S-R22E 1026' FNL & 1637' FEL Bottomhole: NWNE Sec 24-T10S-R22E 540' FNL & 1605' FEL

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore, L.P.'s Application for Permit to Drill regarding the above referenced well on June 9, 2008, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling of Wells.

- Kerr-McGee's NBU 1022-24B1DS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to access portions of our lease which are otherwise inaccessible due to topography.
- Furthermore, Kerr-McGee hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee requests the permit be granted pursuant to R649-3-11.

Sincerely,

Kevin McIntyre

Regulatory Analyst

Kin -

RECEIVED

JUN 1 0 2008

DIV. OF OIL, GAS & MINING

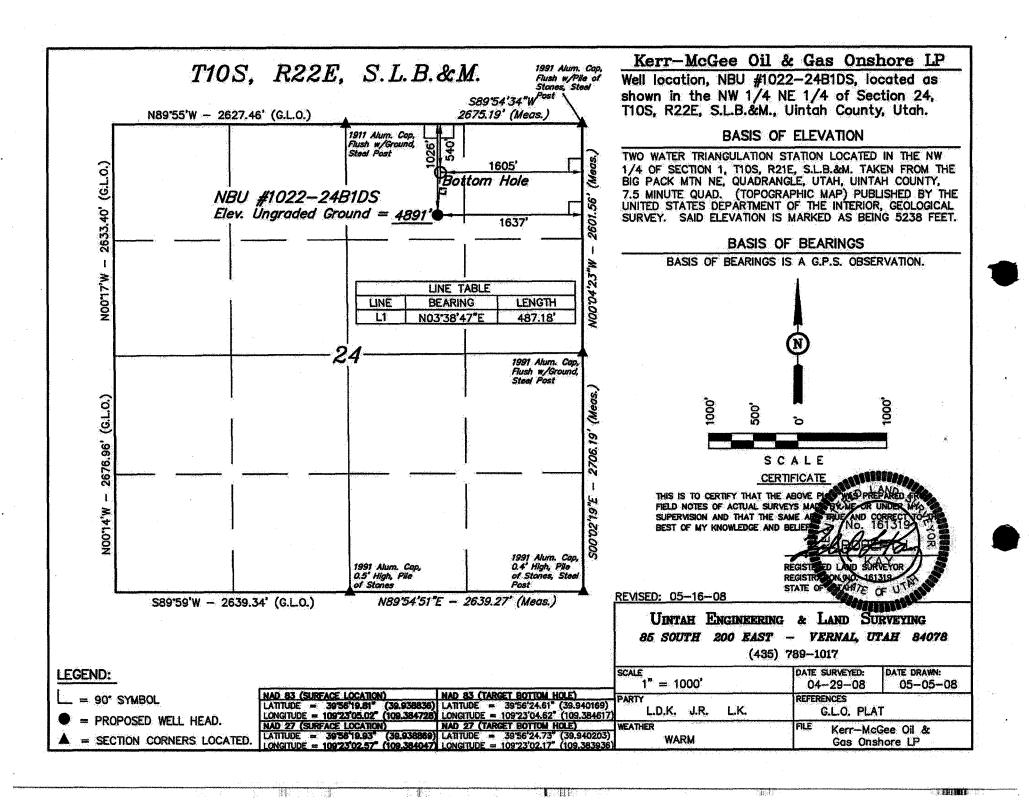
STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT (highlight changes)

	1	APPLICA	ATION FOR	PERMIT TO	DRILL	5. MINERAL ST ML 2		6. SURFACE: State
1A. TYPE OF WO	DRK: D	RILL 🔽	REENTER [DEEPEN		7. IF INDIAN	ALLOTTEE OR T	RIBE NAME:
B. TYPE OF WE	ill: OIL 🗌	C 1. / I I	8. UNIT or CA AGREEMENT NAME: 891008900A					
2. NAME OF OPE		Onshore,	LP			1	ME and NUMBER: 022-24B1D	
3. ADDRESS OF P.O. Box 1		_{CITY} Den	ver	CO 80	PHONE NUMBER: (720) 929-6226		D POOL, OR WILL Buttes Fie	
	WELL (FOOTAGE	S) 63801	09X 4477	014 V 39.	938884 -109.38401		R, SECTION, TOW	
	1026' FNL	& 1637' F	EL		-	NWNE	-	22E
AT PROPOSED	PRODUCING ZOI	NE: NWNE	540' FNL &	1605' FEL	70764 44221624 140214 -109.3839			
14. DISTANCE IN	MILES AND DIRE	CTION FROM N	EAREST TOWN OR F	OST OFFICE:	14() 214 -104. 38.34	12. COUNTY	:	13. STATE:
33.3 mile	s east of Ou	ıray, Utah				Uintah		UTAH
	NEAREST PROF	ERTY OR LEAS	E LINE (FEET)	16. NUMBER O	F ACRES IN LEASE:	17. NUMBER OF AC	RES ASSIGNED	
540'	ALEADEAT MELL	(BB) 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UDI ETEO OD	40.500.0000	200			10
APPLIED FOR	O NEAREST WELL R) ON THIS LEASE	(DRILLING, CO (FEET)	MPLETED, OR	19. PROPOSED	7,757	20. BOND DESCRIP		
3000' 21, ELEVATIONS	(SHOW WHETHE	R DF, RT, GR, E	TC.):	22. APPROXIM	ATE DATE WORK WILL START:	RLB000523		
4891' GL	•	. , .	,			10 days		·
24.			PPOPO	SED CASING A	ND CEMENTING PROGRAM		· , · ·	
SIZE OF HOLE	CASING SIZE	GRADE AND W	EIGHT PER FOOT	SETTING DEPTH		ANTITY, YIELD, AND S	LURRY WEIGHT	
12 1/4"	9 5/8"	J-55	36#	1,500	Premium Cement	215 sx	1.18	15.6
	3 3/3		00.,		Premium Cement	50 sx	1.18	15.6
					Tromain Cononc			10.0
7 7/8"	4 1/2"	I-80	11.6#	7,757	Premium Lite II	760 sx	3.38	11.0
					50/50 Poz G	750 sx	1.31	14.3
						-		
				· · · · · · · · · · · · · · · · · · ·			_	
25.				ATTA	CHMENTS	_		
VERIFY THE FOL	LOWING ARE ATT	ACHED IN ACC	DRDANCE WITH THE	UTAH OIL AND GAS C	ONSERVATION GENERAL RULES:			
✓ WELL PLA	AT OR MAP PREPA	ARED BY LICEN	SED SURVEYOR OR	ENGINFFR	COMPLETE DRILLING PLAN			
			S APPROVAL FOR U		FORM 5, IF OPERATOR IS PE	PSON OR COMPANY	THED THAN TH	E LEASE OWNED
		With the state of		oz or with	TONIUS, II OI ERVIORIOTE	NOOTE OIL COMPANY	OTTICK TIME IS	ELEAGE OWNER
	_{PRINT)} Kevin I	McIntvre			TELE Regulatory An	alvst I		
NAME (PLEASE F	RINT)	``		-				
SIGNATURE					6/9/2008			
This space for Stat	e use only)			e.	Approved by the Utah Division of		RFC	EIVED
				este a 	Oil, Gas and Mining	3		
API NUMBER ASS	IGNED: 4	3-047-4	6130		APPROVAL:		JUN	1 0 2008
					Date: 01-28-09	-A-	OIV. OF OIL,	GAS & MINING

(11/2001)



NBU 1022-24B1DS NWNE Sec. 24, T 10S R 22E UINTAH COUNTY, UTAH ST ML 23610

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	470'
Top of Birds Nest Water	784'
Mahogany	1152'
Wasatch	3506'
Mesaverde	5714'
MVU2	6547'
MVL1	7123'
TVD	7700'
MD	7757'

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	<u>Formation</u>	<u>Depth</u>
	Green River	470'
Water	Top of Birds Nest Water	784'
	Mahogany	1152'
Gas	Wasatch	3506'
Gas	Mesaverde	5714'
Gas	MVU2	6547'
Gas	MVL1	7123'
Water	N/A	
Other Minerals	N/A	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. <u>Drilling Fluids Program</u>:

Please refer to the attached Drilling Program.

6. Evaluation Program:

Please refer to the attached Drilling Program.

7. <u>Abnormal Conditions</u>:

Maximum anticipated bottomhole pressure calculated at 7757' TD, approximately equals 4809 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3102 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

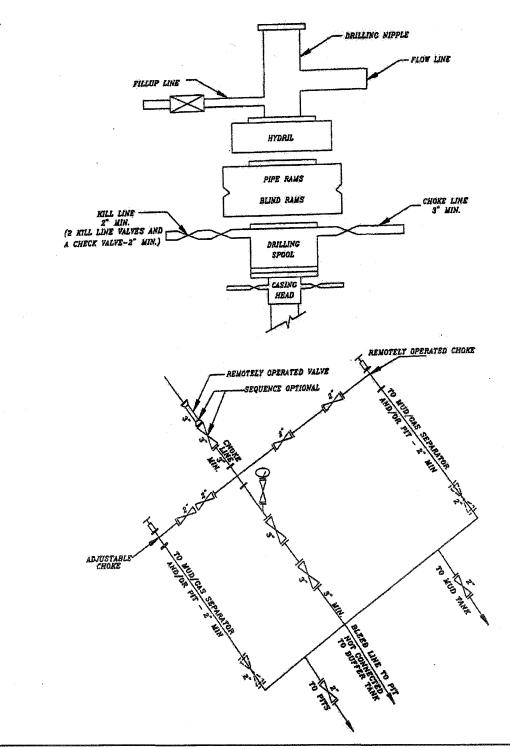
9. Variances:

Please refer to the attached Drilling Program.

10. Other Information:

Please refer to the attached Drilling Program.

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

NBU 1022-24B1DS NWNE Sec. 24, T 10S R 22E Uintah County, UT ST ML 23610

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Directional Drilling:

In accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

2. <u>Existing Roads</u>:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

3. Planned Access Roads:

Approximately 2.3 mi. +/- of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

4. <u>Location of Existing Wells Within a 1-Mile Radius:</u>

Please refer to Topo Map C.

5. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 20,438' of 4" pipeline is proposed. The total distance on state land is 16,291', the total distance on BLM land is 3,207, and the total distance on Fee land is 940'. Refer to Topo D for the proposed pipeline.

6. Location and Type of Water Supply:

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

7. <u>Source of Construction Materials</u>:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

8. <u>Methods of Handling Waste Materials</u>:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural

drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility, Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond, SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond, Sec. 2, T10S, R23E.

9. Ancillary Facilities:

None are anticipated.

10. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

11. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

12. <u>Surface/Mineral Ownership</u>:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

13. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey has been completed and is attached.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it Within 460' of any non-committed tract lying within the boundaries of the Unit.

14. Lessee's or Operators's Representative & Certification:

Kevin McIntyre Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6226 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

NBU 1022-24B1DS Surface Use & Operations Plan Page 6

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre

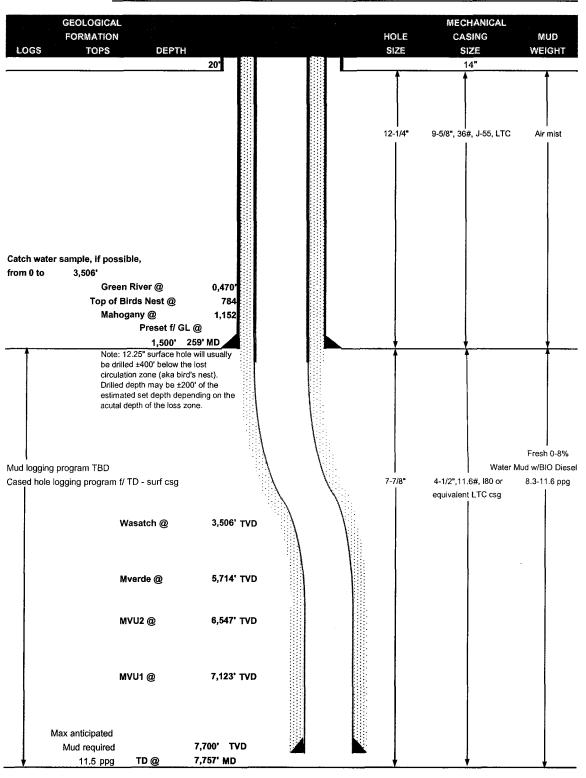
6/9/2008

Date



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	June 9, 2008	
WELL NAME	NBU 1022-24B1DS	TD	7,700' TVD	7,757' MD
FIELD Natural Butte	es COUNTY Uintah STATE	ltah	ELEVATION 4,891'	GL KB 4,906'
SURFACE LOCATION	NWNE 1026' FNL & 1637' FEL, Sec. 24, T 10S R	22E		
	Latitude: 39.938869 Longitude: -109	384047	NAD 27	
BTM HOLE LOCATION	NWNE 540' FNL & 1605' FEL, Sec. 24, T 10S R 2			
	Latitude: 39.940203 Longitude: -109	383936	NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde			
ADDITIONAL INFO	Regulatory Agencies: UDOGM (MINERALS AND	SURFACE	E), BLM, Tri-County Health	Dept.







CASING PROGRAM

							DESIGN FACT	ORS
	SIZE	INTERVAL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'					<u> </u>	
						3520	2020	453000
SURFACE	9-5/8"	0 to 1500	36.00	J-55	LTC	1.21	2.88	10.68
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 7700	11.60	1-80	LTC	2.67	1.38	2.58
	4.							
							<u> </u>	

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

0.0 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP

3102 psi

CEMENT PROGRAM

i						
	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1		+ .25 pps flocele			}	
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
		+ 2% CaCl + .25 pps flocele				
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to sur	face, optic	n 2 will be	utilized	
Option 2 LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
		+.25 pps Flocele + 3% salt BWOW				
TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
	M B	+ .25 pps flocele	155			
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
				1.		
PRODUCTION LEAD	5,210'	Premium Lite II + 3% KCI + 0.25 pps	570	60%	11.00	3.38
•		celloflake + 5 pps gilsonite + 10% get	1			
		+ 0.5% extender				
				4.		
TAIL	2,490'	50/50 Poz/G + 10% salt + 2% gel	700	60%	14.30	1.31
		+.1% R-3				

^{*}Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.							
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.							

ADDITIONAL INFORMATION

ENGINEER:	DATE:
Most rigs have PVT System for mud monitoring, If no PVT is available, visual	monitoring will be utilized.
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees	3.
& lower kelly valves.	
tour sheet. Function test rams on each trip. Maintain safety valve & inside B	OP on rig floor at all times. Kelly to be equipped with upper
BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,	500 psi) prior to drilling out. Record on chart recorder &
Test casing head to 750 psi after installing. Test surface casing to 1,500 psi	prior to drilling out.

DRILLING ENGINEER:		DATE:
	Brad Laney	
DRILLING SUPERINTENDENT:		DATE:
	Randy Bayne	



Drilling	Se	rvi	ces
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Proposal



ANADARKO - KERR McGEE

NBU#1022-24B1DS (1022-24B PAD)

UINTAH COUNTY, UTAH

WELL FILE: PLAN 1

JUNE 5, 2008

Weatherford International, Ltd.

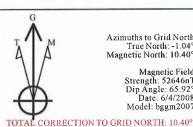
15710 John F. Kennedy Blvd Houston, Texas 77032 USA +1.281.260.1300 Main +1.281.260.4730 Fax www.weatherford.com





KERR MCGEE OIL & GAS NBU #1022-24B1DS **UINTAH COUNTY, UTAH**





1000

6500

7000

7500

8000

-500

0

500

1000

Vertical Section at 2.59° [1000ft/in]

Azimuths to Grid North True North: -1.04° Magnetic North: 10.40°

Magnetic Field Strength: 52646nT Dip Angle: 65.92° Date: 6/4/2008 Model: bggm2007

					SECTION	DETAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	÷E/-W	DLeg	TFace	VSec	Target
i	0.00	0.00	2.59	0.00	0.00	0.00	0.00	0.00	0.00	
2	1560.00	0.00	2.59	1560.00	0.00	0.00	0.00	0.00	0.00	
3	2059.30	14.98	2.59	2053.63	64.83	2.93	3.00	2.59	64.90	
4	3313.85	14.98	2.59	3265.55	388.76	17.60	0.00	0.00	389.15	
1 5	4062.80	0.00	2.59	4006.00	486.00	22.00	2.00	180.00	486.50	
6	7756.80	0.00	2.59	7700.00	486.00	22.00	0.00	0,00	486.50	PBHL-24B1DS

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
NBU 1022-24B1DS	25.00	-54.00	14507886.00	2093392.00	39°56'19.929N	109°23'02,565W	N/A



KB ELEV = 4911'

GR ELEV = 4891

CSG PT

FIELD DETAILS

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Universal Transverse Mercator (USfeet) Geodetic System:

Ellipsoid: NAD27 (Clarke 1866)
Zone: UTM Zone 12, North 114W to 108W etic Model: bggm2007

Magnetic Model:

System Datum: Local North: Mean Sea Level Grid North

SITE DETAILS

NBU 1022-24B PAD SECT 24-T10S-R22E

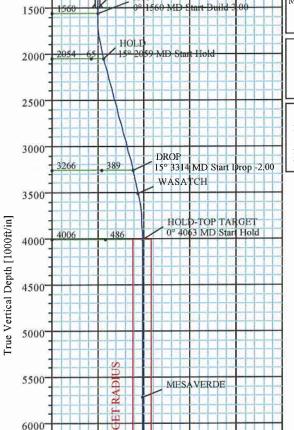
Site Centre Northing: 14507861.00 Easting: 2093446.00

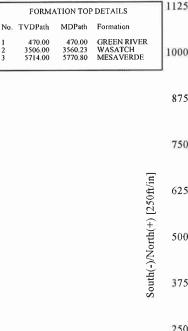
Ground Level: 4891.00
Positional Uncertainty: 0,00
Convergence: 1,04

TARGET DETAILS

Name TVD +N/-S+E/-W Northing Easting Shape

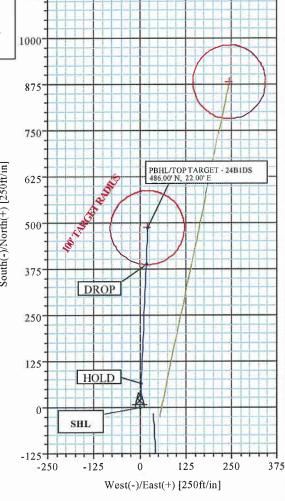
PBHL-24B1DS 7700,00 486.00 22,00 14508372.00 2093414.00 Circle (Radius: 100)





2000

1500



Plan: Plan #1 (NBU 1022-24B1DS/1) Created By: L WINCHELL Date: 6/5/2008



Weatherford Drilling Services **Directional Plan Report**



Company: Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) Field:

NBU 1022-24B PAD Site: NBU 1022-24B1DS Well:

Wellpath:

Well Position:

Wellpath: 1

Current Datum:

Magnetic Data:

Field Strength:

Vertical Section:

Date: 6/5/2008

Time: 07:27:01 Page: Well: NBU 1022-24B1DS, Grid North

Co-ordinate(NE) Reference: Vertical (TVD) Reference: SITE 4911.0

Well (0.00N,0.00E,2.59Azi) Section (VS) Reference:

Survey Calculation Method:

Db: Sybase Minimum Curvature

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) Field:

Map System: Universal Transverse Mercator (USfeet)

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Coordinate System: Geomagnetic Model:

Map Zone:

UTM Zone 12, North 114W to 108W

Well Centre bggm2007

NBU 1022-24B PAD Site:

SECT 24-T10S-R22E

Northing: 14507861.00 ft Latitude: 39 56 19.672 N Site Position: 1.878 W 109 23 2093446.00 ft Longitude: From: Map Easting: Position Uncertainty: 0.00 ft North Reference: Grid

4891.00 ft

Ground Level:

Grid Convergence: 1.04 deg

Well: NBU 1022-24B1DS **Slot Name:**

> 14507886.00 ft 25.00 ft +N/-SNorthing: 2093392.00 ft +E/-W-54.00 ft Easting:

19.929 N 39 56 Latitude: 2.565 W 23 109 Longitude:

Position Uncertainty:

SITE

0.00 ft

52646 nT

6/4/2008

Depth From (TVD)

Drilled From: Surface

Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level

11.43 deg Declination: 65.92 deg Mag Dip Angle: +E/-W Direction

+N/-S deg ft ft ft 2.59 0.00 0.00 0.00

Height 4911.00 ft

6/4/2008 **Date Composed:** Plan: Plan #1

Version:

Tied-to: From Surface Principal: Yes

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100f	Build t deg/100f	Turn t deg/100ft	TFO deg	Target
0.00	0.00	2.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1560.00	0.00	2.59	1560.00	0.00	0.00	0.00	0.00	0.00	0.00	
2059.30	14.98	2.59	2053.63	64.83	2.93	3.00	3.00	0.00	2.59	
3313.85	14.98	2.59	3265.55	388.76	17.60	0.00	0.00	0.00	0.00	
4062.80	0.00	2.59	4006.00	486.00	22.00	2.00	-2.00	0.00	180.00	
7756.80	0.00	2.59	7700.00	486.00	22.00	0.00	0.00	0.00	0.00	PBHL-24B1DS

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Commen
1500.00	0.00	2.59	1500.00	0.00	0.00	0.00	0.00	14507886.00	2093392.00	9 5/8" CSG PT
1560.00	0.00	2.59	1560.00	0.00	0.00	0.00	0.00	14507886.00	2093392.00	KOP
1600.00	1.20	2.59	1600.00	0.42	0.02	0.42	3.00	14507886.42	2093392.02	
1700.00	4.20	2.59	1699.87	5.12	0.23	5.13	3.00	14507891.12	2093392.23	
1800.00	7.20	2.59	1799.37	15.04	0.68	15.06	3.00	14507901.04	2093392.68	
1900.00	10.20	2.59	1898.21	30.15	1.36	30.18	3.00	14507916.15	2093393.36	
2000.00	13.20	2.59	1996.12	50.41	2.28	50.46	3.00	14507936.41	2093394.28	
2059.30	14.98	2.59	2053.63	64.83	2.93	64.90	3.00	14507950.83	2093394.93	HOLD
2100.00	14.98	2.59	2092.95	75.34	3.41	75.42	0.00	14507961.34	2093395.41	
2200.00	14.98	2.59	2189.55	101.16	4.58	101.26	0.00	14507987.16	2093396.58	
2300.00	14.98	2.59	2286.15	126.98	5.75	127.11	0.00	14508012.98	2093397.75	
2400.00	14.98	2.59	2382.75	152.80	6.92	152.96	0.00	14508038.80	2093398.92	
2500.00	14.98	2.59	2479.36	178.62	8.09	178.80	0.00	14508064.62	2093400.09	
2600.00	14.98	2.59	2575.96	204.44	9.25	204.65	0.00	14508090.44	2093401.25	
2700.00	14.98	2.59	2672.56	230.26	10.42	230.49	0.00	14508116.26	2093402.42	



Weatherford Drilling Services **Directional Plan Report**



Company: Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
NBU 1022-24B PAD
NBU 1022-24B1DS Field:

Site: Well:

Wellpath: 1

Date: 6/5/2008

Time: 07:27:01 Page: :: Well: NBU 1022-24B1DS, Grid North Co-ordinate(NE) Reference:

Vertical (TVD) Reference: SITE 4911.0

Well (0.00N,0.00E,2.59Azi) Minimum Curvature Section (VS) Reference:

Db: Sybase Survey Calculation Method:

MD ft 2800.00 2900.00 3000.00	Incl deg 14.98	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
2900.00	14.00					п	deg/ foot			
2900.00		2.59	2769.16	256.08	11.59	256.34	0.00	14508142.08	2093403.59	
	14.98	2.59	2865.77	281.90	12.76	282.19	0.00	14508167.90	2093404.76	
	14.98	2.59	2962.37	307.72	13.93	308.03	0.00	14508193.72	2093405.93	
3100.00	14.98	2.59	3058.97	333.54	15.10	333.88	0.00	14508219.54	2093407.10	
3200.00	14.98	2.59	3155.57	359.36	16.27	359.73	0.00	14508245.36	2093408.27	
3200.00	14.00	2.00	0100.01	000.00	10.21	000.10	0.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
3300.00	14.98	2.59	3252.17	385.18	17.44	385.57	0.00	14508271.18	2093409.44	DDOD
3313.85	14.98	2.59	3265.55	388.76	17.60	389.15	0.00	14508274.76	2093409.60	DROP
3400.00	13.26	2.59	3349.10	409.75	18.55	410.17	2.00	14508295.75	2093410.55	
3500.00	11.26	2.59	3446.81	430.95	19.51	431.39	2.00	14508316.95	2093411.51	
3560.23	10.05	2.59	3506.00	442.07	20.01	442.53	2.00	14508328.07	2093412.01	WASATCH
3600.00	9.26	2.59	3545.21	448.74	20.31	449.20	2.00	14508334.74	2093412.31	
3700.00	7.26	2.59	3644.17	463.08	20.96	463.56	2.00	14508349.08	2093412.96	
3800.00	5.26	2.59	3743.57	473.97	21.46	474.45	2.00	14508359.97	2093413.46	
3900.00	3.26	2.59	3843.29	481.38	21.79	481.87	2.00	14508367.38	2093413.79	
4000.00	1.26	2.59	3943.21	485.31	21.97	485.81	2.00	14508371.31	2093413.97	
4062.80	0.00	2.59	4006.00	486.00	22.00	486.50	2.00	14508372.00	2093414.00	HOLD-TOP TARG
4100.00	0.00	2.59	4043.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4200.00	0.00	2.59	4143.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4300.00	0.00	2.59	4243.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4400.00	0.00	2.59	4343.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4500.00	0.00	2.59	4443.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4600.00	0.00	2.59	4543.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
	0.00	2.59	4643.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4700.00			4743.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4800.00	0.00	2.59	4843.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
4900.00	0.00	2.59	4043.20	400.00	22.00	400.50	0.00	14300372.00	2095-1-1.00	
5000.00	0.00	2.59	4943.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
5100.00	0.00	2.59	5043.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
5200.00	0.00	2.59	5143.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
5300.00	0.00	2.59	5243.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
5400.00	0.00	2.59	5343.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
EE00.00	0.00	2.59	5443.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
5500.00			5543.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
5600.00	0.00	2.59			22.00	486.50	0.00	14508372.00	2093414.00	
5700.00	0.00	2.59	5643.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	MESAVERDE
5770.80 5800.00	0.00 0.00	2.59 2.59	5714.00 5743.20	486.00 486.00	22.00	486.50	0.00	14508372.00	2093414.00	MEGAVERDE
0000.00	0.00	2.00	07 10.20	100.00		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
5900.00	0.00	2.59	5843.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6000.00	0.00	2.59	5943.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6100.00	0.00	2.59	6043.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6200.00	0.00	2.59	6143.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6300.00	0.00	2.59	6243.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6400.00	0.00	2.59	6343.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6400.00	0.00	2.59 2.59	6443.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6500.00		2.59	6543.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6600.00	0.00			486.00 486.00	22.00	486.50	0.00	14508372.00	2093414.00	
6700.00	0.00	2.59	6643.20			486.50	0.00	14508372.00	2093414.00	
6800.00	0.00	2.59	6743.20	486.00	22.00	400.00	0.00	14000012.00		
6900.00	0.00	2.59	6843.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
7000.00	0.00	2.59	6943.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
7100.00	0.00	2.59	7043.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
7200.00	0.00	2.59	7143.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
7300.00	0.00	2.59	7243.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
	0.00	0.50	7040.00	400.00	00.00	400 50	0.00	44500270.00	2002444.00	
	0.00	2.59	7343.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	
7400.00 7500.00	0.00	2.59	7443.20	486.00	22.00	486.50	0.00	14508372.00	2093414.00	



Weatherford Drilling Services **Directional Plan Report**



Company: Anadarko-Kerr-McGee
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

NBU 1022-24B PAD Site: NBU 1022-24B1DS Well:

Wellpath: 1

Date: 6/5/2008

Time: 07:27:01

Well: NBU 1022-24B1DS, Grid North

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

SITE 4911.0

Section (VS) Reference:

Well (0.00N,0.00E,2.59Azi) Survey Calculation Method: Minimum Curvature

Db: Sybase

Surve	e١
-------	----

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
7700.00 7756.80	0.00 0.00	2.59 2.59	7643.20 7700.00	486.00 486.00	22.00 22.00	486.50 486.50	0.00 0.00	14508372.00 14508372.00	2093414.00 2093414.00	PBHL-24B1DS

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
PBHL-24B1DS -Circle (Radiu: -Plan hit targe			7700.00	486.00	22.00	14508372.002	2093414.00	39 56 24.728 N	109 23 2.170 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size	Name	
1500.00	1500.00	9.625	12.250	9 5/8" CSG PT	

Annotation

MD TVD ft ft ft 1560.00 1560.00 KOP 2059.30 2053.63 HOLD 3313.85 3265.55 DROP 4062.80 4006.00 HOLD-TOP TARGET 7756.80 7700.00 PBHL-24B1DS	1 AMAG COLUMN	-		
2059.30 2053.63 HOLD 3313.85 3265.55 DROP 4062.80 4006.00 HOLD-TOP TARGET	1			
	2059.30 3313.85 4062.80	2053.63 3265.55 4006.00	HOLD DROP HOLD-TOP TARGET	

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
470.00	470.00	GREEN RIVER		0.00	0.00
3560.23	3506.00	WASATCH		0.00	0.00
5770.80	5714.00	MESAVERDE		0.00	0.00







Anadarko-Kerr-McGee Company:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) Field:

NBU 1022-24B PAD

Reference Site: Reference Well:

NBU 1022-24B1DS Reference Wellpath: 1

NO GLOBAL SCAN: Using user defined selection & scan criteria

Interpolation Method: TVD Interval: 0.00 to 7756.80 ft

Depth Range: 0.00 to Maximum Radius: 10000.00 ft Plan #1

Date: 6/5/2008

Vertical (TVD) Reference:

Time: 08:34:57

Well: NBU 1022-24B1DS, Grid North

Co-ordinate(NE) Reference: SITE 4911.0

Db: Sybase

Page:

Error Model: Scan Method: **Error Surface:**

ISCWSA Ellipse Closest Approach 3D

Plan: Plan #1

Ellipse

6/4/2008 Date Composed:

Reference:

Version: Tied-to:

From Surface

Principal: Yes

< Site	Offset Wellpath Well	> Wellpath	Reference MD ft	Offset MD ft			Separation Factor	Warning	
	PAD NBU 1022-24B1AS PAD NBU 1022-24G1S	1 V0 Plan: Plan #1 V1 1 V0 Plan: Plan #1 V1	2314.33 1600.00	2317.27 1599.56	79.44 40.63	68.67 34.19	7.38 6.30		

NBU 1022-24B PAD Well: NBU 1022-24B1AS Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Refe	erence	Of	fset	Semi-M	lajor Axis			Location			Separation	
MD	TVD	MD	TVD	Ref		TFO-HS		East		Distance	Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
0.00	0.00	0.00	0.00	0.00	0.00	114.84	-25.00	54.00	59.51			No Data
100.00	100.00	100.00	100.00	0.08	0.08	114.84	-25.00	54.00	59.51	59.34	355.15	
200.00	200.00	200.00	200.00	0.29	0.29	114.84	-25.00	54.00	59.51	58.92	101.47	
300.00	300.00	300.00	300.00	0.50	0.50	114.84	-25.00	54.00	59.51	58.50	59.19	i
400.00	400.00	400.00	400.00	0.71	0.71	114.84	-25.00	54.00	59.51	58.08	41.78	
		#00 00	500.00	0.00	0.00	44404	05.00	54.00	50.54	E7 00	32.29	
500.00	500.00	500.00	500.00	0.92		114.84	-25.00	54.00	59.51	57.66 57.24	32.29 26.31	Į.
600.00	600.00	600.00	600.00	1.13		114.84	-25.00	54.00	59.51			
700.00	700.00	700.00	700.00	1.34		114.84	-25.00	54.00	59.51	56.83	22.20	
800.00	800.00	800.00	800.00	1.55		114.84	-25.00	54.00	59.51	56.41	19.20	
900.00	900.00	900.00	900.00	1.76	1.76	114.84	-25.00	54.00	59.51	55.99	16.91	
1000.00	1000.00	1000.00	1000.00	1.97	1.97	114.84	-25.00	54.00	59.51	55.57	15.11	
1100.00	1100.00	1100.00	1100.00	2.18		114.84	-25.00	54.00	59.51	55.15	13.66	Į.
1200.00	1200.00	1200.00	1200.00	2.39		114.84	-25.00	54.00	59.51	54.73	12.46	ì
1300.00	1300.00	1300.00	1300.00	2.60		114.84	-25.00	54.00	59.51	54.31	11.46	
1400.00	1400.00	1400.00	1400.00	2.81		114.84	-25.00	54.00	59.51	53.89	10.60	
1400.00	1400.00	1700.00	1700.00	2.01	2.01	111.01	20.00	01.00	00.01	00.00	10.00	
1500.00	1500.00	1500.00	1500.00	3.02	3.02	114.84	-25.00	54.00	59.51	53.47	9.87	
1600.00	1600.00	1600.28	1600.28	3.23	3.23	112.23	-24.58	54.09	59.57	53.12	9.23	
1700.13	1700.00	1701.10	1700.97	3.44	3.44	111.95	-19.90	55.08	60.30	53.42	8.77	ŀ
1800.64	1800.00	1802.29	1801.65	3.66	3.66	111.40	-9.98	57.17	61.84	54.52	8.46	
1901.82	1900.00	1904.14	1902.28	3.90	3.91	110.59	5.25	60.39	64.21	56.42	8.24	
								0475	07.45	50.44	0.00	
2003.99	2000.00	2006.92	2002.85	4.18		109.58	25.93	64.75	67.45	59.11	8.08	
2107.30	2100.00	2110.78	2103.18	4.52		108.02	52.17	70.29	71.41	62.38	7.91	İ
2210.82	2200.00	2214.50	2201.76	4.90		103.01	83.66	76.93	75.04	65.20	7.63	
2314.33	2300.00	2317.27	2297.58	5.31	5.47		119.98	84.60	79.44	68.67	7.38	
2417.85	2400.00	2418.52	2389.90	5.74	6.06	83.69	160.64	93.18	86.71	75.00	7.41	
2521.37	2500.00	2519.72	2480.71	6.18	6.74	72.93	204.32	102.40	98.12	85.58	7.82	
2624.89	2600.00	2621.09	2571.67	6.64	7.45		248.13	111.65	112.32	99.04	8.46	
2728.40	2700.00	2722.47	2662.62	7.12	8.19		291.95	120.89	128.38		9.20	
2831.92	2800.00	2823.85	2753.58	7.12	8.95		335.76	130.14	145.68		9.97	
	2900.00	2925.23	2844.53	8.09	9.73		379.57	139.38	163.83		10.74	
2935.44	2900.00	2925.23	2044.00	0.09	9.13	45.23	319.31	109.00	105.05	140.57	10.74	
3038.96	3000.00	3026.61	2935.49	8.58	10.51		423.38	148.63	182.58		11.48	
3142.47	3100.00	3127.99	3026.44	9.08	11.31		467.19	157.88	201.76		12.18	
3245.99	3200.00	3229.37	3117.39	9.59	12.12		511.00	167.12	221.26		12.85	
3349.45	3300.00	3330.64	3208.26	10.02	12.93		554.77	176.36	241.15		13.54	
3452.19	3400.00	3430.62	3297.95	10.22	13.74	38.14	597.98	185.48	263.33	245.19	14.51	
3554.13	3500.00	3528.96	3386.18	10.30	14.53	36.42	640.47	194.45	288.42	270.12	15.76	



Weatherford Drilling Services **Anticollision Report**



Company:

Reference Well:

Reference Wellpath: 1

Anadarko-Kerr-McGee

Date: 6/5/2008

Time: 08:34:57

Field: Reference Site: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 1022-24B PAD

NBU 1022-24B1DS

Co-ordinate(NE) Reference:

Well: NBU 1022-24B1DS, Grid North

Vertical (TVD) Reference: SITE 4911.0

Db: Sybase

Site: Wellpath: 1 V0 Plan: Plan #1 V1

NBU 1022-24B PAD NBU 1022-24B1AS

ft 0.00 Inter-Site Error:

Reference MD	<u> </u>	venpatu:	I VO I IAII	. Flail #1 V				_			Inter-Sit			
MID TVD MID TVD Ref Offset TrO-HS North East Distance Distance Factor Warning TrO-HS Ref		Refe	rence	Of	fset	Semi-M	lajor Axis		Offset 1	Location	Ctr-Ctr	Edge S	eparation	
### ft				MD	TVD				North	East	Distance	Distance	Factor	Warning
3655.43 3600.00 3636.57 3483.44 10.38 15.16 34.58 685.53 203.96 315.19 296.92 17.25 3756.21 3700.00 3748.24 3866.49 10.38 15.60 32.88 727.58 212.83 340.77 322.70 18.86 3866.62 3800.00 3861.42 3952.95 10.37 16.01 31.60 765.15 220.76 384.99 347.15 20.46 3866.67 3800.00 3976.22 3020.73 10.32 16.37 30.39 797.95 227.68 387.74 370.18 22.06 3866.67 3800.00 3976.22 3020.73 10.32 16.37 30.39 797.95 227.68 387.74 370.18 22.00 4656.00 400.00 4021.27 4052.01 10.30 16.92 30.88 848.13 238.27 427.25 409.98 24.74 426.80 420.00 4211.27 4032.01 10.30 16.92 30.88 848.13 238.27 427.25 409.98 24.74 426.80 420.00 4331.96 4161.46 10.41 17.68 30.12 86.90 241.81 440.72 423.12 25.61 346.80 420.00 4577.15 4386.06 10.65 17.14 29.68 875.88 244.07 449.34 432.08 26.20 4456.80 4400.00 4577.15 4386.06 10.65 17.14 29.68 875.88 244.07 449.84 432.34 20.82 26.20 4456.80 4400.00 4781.99 4900.00 10.90 17.25 29.51 870.91 244.98 452.66 435.59 26.20 4456.80 4600.00 4781.09 4500.00 10.90 17.25 29.51 880.00 245.00 452.73 433.42 23.44 4756.80 4700.00 4891.09 4700.00 10.90 17.25 29.51 880.00 245.00 452.73 433.42 23.44 4756.80 4700.00 4891.09 4700.00 11.03 17.32 29.51 880.00 245.00 452.73 433.42 23.44 4756.80 4700.00 4891.09 4700.00 11.03 17.32 29.51 880.00 245.00 452.73 433.42 23.44 4756.80 4700.00 4891.09 4700.00 11.16 17.39 29.51 880.00 245.00 452.73 432.51 23.12 4856.80 4900.00 5081.09 4900.00 11.16 17.39 29.51 880.00 245.00 452.73 432.67 22.80 4856.80 500.00 5281.09 4900.00 11.16 17.39 29.51 880.00 245.00 452.73 432.51 23.12 4856.80 500.00 5281.09 500.00 11.28 17.47 29.51 880.00 245.00 452.73 432.67 22.48 506.80 450.00 6581.09 500.00 11.28 17.47 29.51 880.00 245.00 452.73 432.67 22.80 456.80 500.00 5281.09 500.00 11.70 17.70 29.51 880.00 245.00 452.73 432.31 22.17 5356.80 500.00 5281.09 500.00 11.70 17.70 29.51 880.00 245.00 452.73 432.31 22.17 5356.80 500.00 5281.09 500.00 11.28 14.17 47 29.51 880.00 245.00 452.73 432.92 21.80 5356.80 5300.00 5881.09 500.00 11.28 18.14 17.82 29.51 880.00 245.00 452.73 432.81 21.89 19.30 5356.80 5300.00 5881.09 500.00	ŀ													9
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6456.80 6400.00 6581.09 6400.00 13.52 18.82 29.51 880.00 245.00 452.73 427.95 18.27 6556.80 6500.00 6681.09 6500.00 13.68 18.92 29.51 880.00 245.00 452.73 427.62 18.03 6656.80 6600.00 6781.09 6600.00 13.84 19.03 29.51 880.00 245.00 452.73 427.28 17.79 6756.80 6700.00 6881.09 6700.00 14.00 19.14 29.51 880.00 245.00 452.73 426.94 17.56 6856.80 6800.00 6981.09 6800.00 14.17 19.25 29.51 880.00 245.00 452.73 426.60 17.33 6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 <th></th> <td></td> <td></td> <td></td> <td>6300.00</td> <td>13.36</td> <td>18.71</td> <td>29.51</td> <td>880.00</td> <td>245.00</td> <td>452.73</td> <td>428.28</td> <td>18.52</td> <td></td>					6300.00	13.36	18.71	29.51	880.00	245.00	452.73	428.28	18.52	
6556.80 6500.00 6681.09 6500.00 13.68 18.92 29.51 880.00 245.00 452.73 427.62 18.03 6656.80 6600.00 6781.09 6600.00 13.84 19.03 29.51 880.00 245.00 452.73 427.28 17.79 6756.80 6700.00 6881.09 6700.00 14.00 19.14 29.51 880.00 245.00 452.73 426.94 17.56 6856.80 6800.00 6981.09 6800.00 14.17 19.25 29.51 880.00 245.00 452.73 426.60 17.33 6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.06 29.51 880.00 245.00 452.73 423.81 15.65											452 73	427 95		
6656.80 6600.00 6781.09 6600.00 13.84 19.03 29.51 880.00 245.00 452.73 427.28 17.79 6756.80 6700.00 6881.09 6700.00 14.00 19.14 29.51 880.00 245.00 452.73 426.94 17.56 6856.80 6800.00 6981.09 6800.00 14.17 19.25 29.51 880.00 245.00 452.73 426.60 17.33 6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65	'	J-100.00	J-00.00	0001.00	0700.00	10.02	10.02	20.01	555.00	0.00	.02.,0			
6656.80 6600.00 6781.09 6600.00 13.84 19.03 29.51 880.00 245.00 452.73 427.28 17.79 6756.80 6700.00 6881.09 6700.00 14.00 19.14 29.51 880.00 245.00 452.73 426.94 17.56 6856.80 6800.00 6981.09 6800.00 14.17 19.25 29.51 880.00 245.00 452.73 426.60 17.33 6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 <th></th> <td>0000</td> <td>0500.00</td> <td>0004.00</td> <td>6500.00</td> <td>12.60</td> <td>10.00</td> <td>20 54</td> <td>000 00</td> <td>245.00</td> <td>450 70</td> <td>427 62</td> <td>10.02</td> <td></td>		0000	0500.00	0004.00	6500.00	12.60	10.00	20 54	000 00	245.00	450 70	427 62	10.02	
6756.80 6700.00 6881.09 6700.00 14.00 19.14 29.51 880.00 245.00 452.73 426.94 17.56 6856.80 6800.00 6981.09 6800.00 14.17 19.25 29.51 880.00 245.00 452.73 426.60 17.33 6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.52 16.05 7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65														
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6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 424.16 15.65				6881.09	6700.00									
6956.80 6900.00 7081.09 6900.00 14.33 19.36 29.51 880.00 245.00 452.73 426.26 17.10 7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 424.16 15.65	(3856.80	6800.00	6981.09	6800.00	14.17	19.25	29.51	880.00	245.00	452.73	426.60	17.33	
7056.80 7000.00 7181.09 7000.00 14.50 19.47 29.51 880.00 245.00 452.73 425.92 16.88 7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7500.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 424.16 15.65											452.73	426.26		
7156.80 7100.00 7281.09 7100.00 14.67 19.59 29.51 880.00 245.00 452.73 425.57 16.67 7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.52 16.05 7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65	Ι,	3000.00	0000.00	, 000	0000.00									
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7256.80 7200.00 7381.09 7200.00 14.84 19.70 29.51 880.00 245.00 452.73 425.22 16.46 7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.52 16.05 7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65											450.70	425.5Z		
7356.80 7300.00 7481.09 7300.00 15.01 19.82 29.51 880.00 245.00 452.73 424.87 16.25 7456.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.52 16.05 7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65														
7456.80 7400.00 7581.09 7400.00 15.18 19.94 29.51 880.00 245.00 452.73 424.52 16.05 7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65										245.00				
7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65	1 7	7356.80	7300.00	7481.09	7300.00									
7556.80 7500.00 7681.09 7500.00 15.35 20.06 29.51 880.00 245.00 452.73 424.16 15.85 7656.80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65	1:	7456.80	7400.00	7581.09	7400.00	15.18	19.94	29.51	00.088	245.00	452.73	424.52	16.05	
7656 80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65			_											
7656 80 7600.00 7781.09 7600.00 15.53 20.19 29.51 880.00 245.00 452.73 423.81 15.65	.	7556 AU	7500.00	7681 09	7500.00	15.35	20.06	29.51	880.00	245.00	452.73	424.16	15.85	
7756.80 7700.00 7881.09 7700.00 15.70 20.31 29.51 880.00 245.00 452.73 423.45 15.46														
7/50,80 7/00.00 7801.09 7/00.00 15.70 20.31 29.31 600.00 243.00 432.73 423.43 15.40											452.73	123.45		
	L	7756.80	7700.00	7881.09	1100.00	15.70	20.31	29.01	000.00	245.00	402.73	4 <u>2</u> 3.40	10.40	

Site: Well: NBU 1022-24B PAD NBU 1022-24G1S

Wellpath: 1 V0 Plan: Plan #1 V1

0.00 ft Inter-Site Error:

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge Separation			
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft	Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	116.57	-18.00	36.00	40.25			No Data
100.00	100.00	100.00	100.00	0.08	0.08	116.57	-18.00	36.00	40.25	40.08	240.22	
200.00	200.00	200.00	200.00	0.29	0.29	116.57	-18.00	36.00	40.25	39.66	68.63	



Weatherford Drilling Services **Anticollision Report**



Company: Field:

Anadarko-Kerr-McGee

Time: 08:34:57

Date: 6/5/2008

Reference Site: Reference Well: Reference Wellpath: 1

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
NBU 1022-24B PAD
NBU 1022-24B1DS
Ver

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: NBU 1022-24B1DS, Grid North SITE 4911.0

Db: Sybase

NBU 1022-24B PAD Well: NBU 1022-24G1S
Wellpath: 1 V0 Plan: Plan #1 V1

0.00 ft Inter-Site Error:

Reference Offset Semi-Major Axis Offset Location Ctr-Ctr Edge S	Separation	
MD TVD MD TVD Ref Offset TFO-HS North East Distance Distance	Factor	Warning
fit fit fit fit deg fit fit fit		
300.00 300.00 300.00 300.00 0.50 0.50 116.57 -18.00 36.00 40.25 39.24	40.04	
000,00	28.26	
400.00 400.00 400.00 400.00 0.71 0.71 116.57 -18.00 36.00 40.25 38.83	20.20	
500.00 500.00 500.00 500.00 0.92 0.92 116.57 -18.00 36.00 40.25 38.41	21.84	
600.00 600.00 600.00 600.00 1.13 1.13 116.57 -18.00 36.00 40.25 37.99	17.79	
700.00 700.00 700.00 700.00 1.34 1.34 116.57 -18.00 36.00 40.25 37.57	15.01	
800.00 800.00 800.00 800.00 1.55 1.55 116.57 -18.00 36.00 40.25 37.15	12.98	
900.00 900.00 900.00 900.00 1.76 1.76 116.57 -18.00 36.00 40.25 36.73	11.44	
1000.00 1000.00 1000.00 1000.00 1.97 1.97 116.57 -18.00 36.00 40.25 36.31	10.22	
1100.00 1100.00 1100.00 1100.00 2.18 2.18 116.57 -18.00 36.00 40.25 35.89	9.24	
1200.00 1200.00 1200.00 1200.00 2.39 2.39 116.57 -18.00 36.00 40.25 35.47	8.43	
1300.00 1300.00 1300.00 1300.00 2.60 2.60 116.57 -18.00 36.00 40.25 35.06	7.75	
1400.00 1400.00 1400.00 1400.00 2.81 2.81 116.57 -18.00 36.00 40.25 34.64	7.17	
1500.00 1500.00 1500.00 1500.00 3.02 3.02 116.57 -18.00 36.00 40.25 34.22	6.67	
1600.00 1600.00 1599.56 1599.56 3.23 3.22 115.00 -18.41 36.03 40.63 34.19	6.30	
1700.13 1700.00 1697.92 1697.80 3.44 3.43 125.08 -22.97 36.32 45.79 38.93	6.67	
1800.64 1800.00 1794.46 1793.87 3.66 3.64 139.34 -32.34 36.92 60.03 52.77	8.27	
1901.82 1900.00 1887.96 1886.35 3.90 3.87 150.76 -46.03 37.79 85.82 78.19	11.24	
	4	
2003.99 2000.00 1977.38 1974.07 4.18 4.11 158.12 -63.33 38.90 123.11 115.12	15.41	
2107.30 2100.00 2063.31 2057.52 4.52 4.37 162.89 -83.73 40.20 170.47 162.11	20.39	
2210.82 2200.00 2153.37 2144.67 4.90 4.68 166.06 -106.40 41.65 220.63 211.82	25.05	
2314.33 2300.00 2243.42 2231.81 5.31 5.02 168.07 -129.07 43.10 271.12 261.85	29.27	Į.
2417.85 2400.00 2333.48 2318.96 5.74 5.37 169.45 -151.74 44.55 321.78 312.05	33.08	
270 47 270 20 21 21 21 21 21 21 21 21 21 21 21 21 21	36.53	
2521.37 2500.00 2423.54 2406.10 6.18 5.74 170.45 -174.41 46.00 372.55 362.35 2624.89 2600.00 2513.60 2493.25 6.64 6.12 171.22 -197.08 47.46 423.38 412.70	39.65	
	42.50	
	45.09	
	47.46	
2935.44 2900.00 2783.77 2754.69 8.09 7.32 172.70 -265.09 51.81 576.11 563.97	41.40	
3038.96 3000.00 2873.83 2841.83 8.58 7.74 173.03 -287.76 53.26 627.06 614.42	49.63	
3142.47 3100.00 2963.89 2928.98 9.08 8.15 173.32 -310.43 54.71 678.02 664.89	51.63	
3245.99 3200.00 3053.95 3016.13 9.59 8.58 173.56 -333.10 56.16 729.00 715.37	53.47	
3349.45 3300.00 3144.06 3103.33 10.02 9.00 173.81 -355.78 57.61 779.76 765.69	55.39	
3452.19 3400.00 3234.93 3191.26 10.22 9.44 174.09 -378.65 59.07 827.65 813.35	57.88	
		ļ
3554.13 3500.00 3339.25 3292.28 10.30 9.79 174.31 -404.63 60.73 871.73 857.42	60.95	
3655.43 3600.00 3475.95 3425.77 10.36 9.91 174.51 -433.97 62.61 908.92 894.91	64.85	
3756.21 3700.00 3618.37 3566.17 10.38 10.00 174.65 -457.74 64.13 937.95 924.27	68.55	
3856.62 3800.00 3765.25 3712.02 10.37 10.03 174.74 -474.93 65.23 958.56 945.27	72.10	
3956.78 3900.00 3915.16 3861.58 10.32 9.97 174.80 -484.76 65.86 970.56 957.70	75.52	
	70.04	
4056.80 4000.00 4053.60 4000.00 10.24 9.88 174.82 -487.00 66.00 973.99 961.55	78.31	
4156.80 4100.00 4153.60 4100.00 10.30 9.94 177.41 -487.00 66.00 973.99 961.40	77.36	
4256.80 4200.00 4253.60 4200.00 10.41 10.05 177.41 -487.00 66.00 973.99 961.04	75.21	
4356.80 4300.00 4353.60 4300.00 10.53 10.17 177.41 -487.00 66.00 973.99 960.68	73.16	
4456.80 4400.00 4453.60 4400.00 10.65 10.29 177.41 -487.00 66.00 973.99 960.32	71.21	
4556 80 4500 00 4553 60 4500 00 10.77 10.41 177.41 -487.00 66.00 973.99 959.95	69.34	
1000:00 1000:00 1000:00 1000:00	67.55	
1000100 1000100 1000100	67.55 65.84	
	64.21	
	62.64	
4956.80 4900.00 4953.60 4900.00 11.29 10.93 177.41 -487.00 66.00 973.99 958.45	02.07	
5056.80 5000.00 5053.60 5000.00 11.42 11.07 177.41 -487.00 66.00 973.99 958.06	61.1 4	
5156.80 5100.00 5153.60 5100.00 11.56 11.21 177.41 -487.00 66.00 973.99 957.68	59.71	Ì
5256.80 5200.00 5253.60 5200.00 11.70 11.35 177.41 -487.00 66.00 973.99 957.30	58.34	
5356.80 5300.00 5353.60 5300.00 11.84 11.49 177.41 -487.00 66.00 973.99 956.91	57.02	



Weatherford Drilling Services **Anticollision Report**



Company: Field:

Anadarko-Kerr-McGee

Date: 6/5/2008

Reference Site: Reference Well:

Reference Wellpath: 1

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
NBU 1022-24B PAD
NBU 1022-24B1DS
Ver Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Time: 08:34:57

SITE 4911.0

Well: NBU 1022-24B1DS, Grid North

Db: Sybase

NBU 1022-24B PAD NBU 1022-24G1S Well:

Wellpath:	1 V0 Plan	: Plan #1 V	1						Inter-Sit	e Error:	0.00	
Refe	rence	Of	fset	Semi-Ma	ajor Axis		Offset L	ocation	Ctr-Ctr	Edge S	Separation	
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS	North ft	East ft	Distance ft	Distance ft	Factor	Warning
5456.80	5400.00	5453.60	5400.00	11.99	11.64	177.41	-487.00	66.00	973.99	956.52	55.75	
5556.80	5500.00	5553.60	5500.00	12.13			-487.00	66.00	973.99		54.54	
5656.80	5600.00	5653.60	5600.00	12.28			-487.00	66.00		955.75	53.37	
5756.80	5700.00	5753.60	5700.00	12.43			-487.00	66.00		955.35	52.25	
5856.80	5800.00	5853.60	5800.00	12.58		177.41		66.00	973.99		51.17	
5956.80	5900.00	5953.60	5900.00	12.73	12.39	177.41	-487.00	66.00	973.99	954.57	50.14	
6056.80	6000.00	6053.60	6000.00	12.88			-487.00	66.00	973.99		49.14	
6156.80	6100.00	6153.60	6100.00	13.04			-487.00	66.00	973.99		48.18	
6256.80	6200.00	6253.60	6200.00	13.20	12.86	177.41	-487.00	66.00		953.38	47.25	
6356.80	6300.00	6353.60	6300.00	13.36	13.02	177.41	-487.00	66.00	973.99		46.36	
6456.80	6400.00	6453.60	6400.00	13.52	13.18	177.41	-487.00	66.00	973.99	952.58	45.49	
6556.80	6500.00	6553.60	6500.00	13.68	13.34	177.41	-487.00	66.00	973.99		44.66	
6656.80	6600.00	6653.60	6600.00	13.84	13.51	177.41	-487.00	66.00	973.99		43.86	
6756.80	6700.00	6753.60	6700.00	14.00	13.67	177.41	-487.00	66.00	973.99	951.39	43.08	
6856.80	6800.00	6853.60	6800.00	14.17	13.84	177.41	-487.00	66.00	973.99	950.98	42.33	
6956.80	6900.00	6953.60	6900.00	14.33	14.00	177.41	-487.00	66.00	973.99	950.58	41.60	
7056.80	7000.00	7053.60	7000.00	14.50	14.17	177.41	-487.00	66.00	973.99	950.18	40.90	
7156.80	7100.00	7153.60	7100.00	14.67	14.34	177.41	-487.00	66.00	973.99	949.78	40.22	
7256.80	7200.00	7253.60	7200.00	14.84			-487.00	66.00	973.99	949.37	39.56	
7356.80	7300.00	7353.60	7300.00	15.01			-487.00	66.00	973.99	948.97	38.92	
7456.80	7400.00	7453.60	7400.00	15.18			-487.00	66.00	973.99	948.56	38.30	
7556.80	7500.00	7553.60	7500.00	15.35	15.03	177.41	-487.00	66.00	973.99	948.16	37.70	
7656.80	7600.00	7653.60	7600.00	15.53	15.21	177.41	-4 87.00	66.00	973.99	947.75	37.12	
7756.80	7700.00	7753.60	7700.00	15.70	15.38	177.41	-487.00	66.00	973.99	947.35	36.55	

Kerr-McGee Oil & Gas Onshore LP NBU #1022-24B, #1022-24B1DS, #1022-24G1S & #1022-24B1AS SECTION 24, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY. THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 2.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST: TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 4.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY1.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 2.3 MILES TO THE EXISTING #2D-36 AND THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 2.3 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 67.8 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-24B, #1022-24B1DS, #1022-24G1S & #1022-24B1AS LOCATED IN UINTAH COUNTY, UTAH

SECTION 24, T10S, R22E, S.L.B.&M.

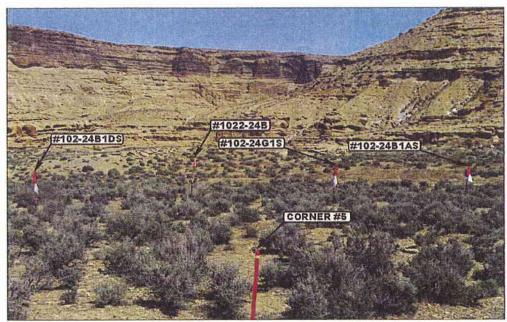


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

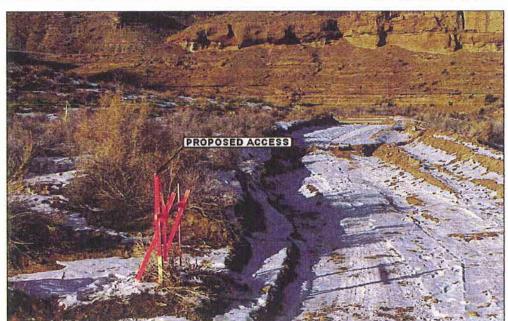


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



Uintah Engineering & Land Surveying 185 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

02 05 04 MONTH DAY YEAR

рното

TAKEN BY: D.K. | DRAWN BY: P.M. | REV: 05-06-08 Z.L.

Kerr-McGee Oil & Gas Onshore LP NBU #1022-24B, #1022-24B1DS, #1022-24G1S & #1022-24B1AS PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH SECTION 24, T10S, R22E, S.L.B.&M.

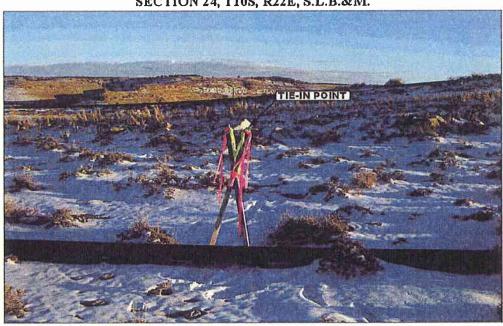


PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: SOUTHEASTERLY



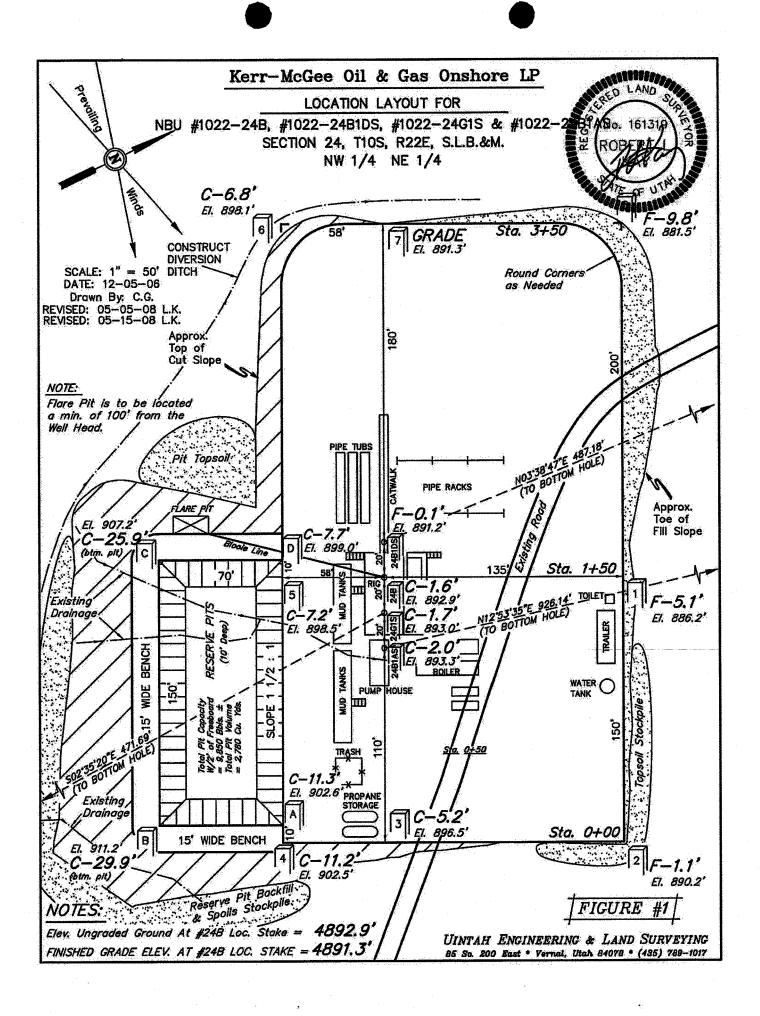
PHOTO: VIEW OF PIPELINE ALIGNMENT

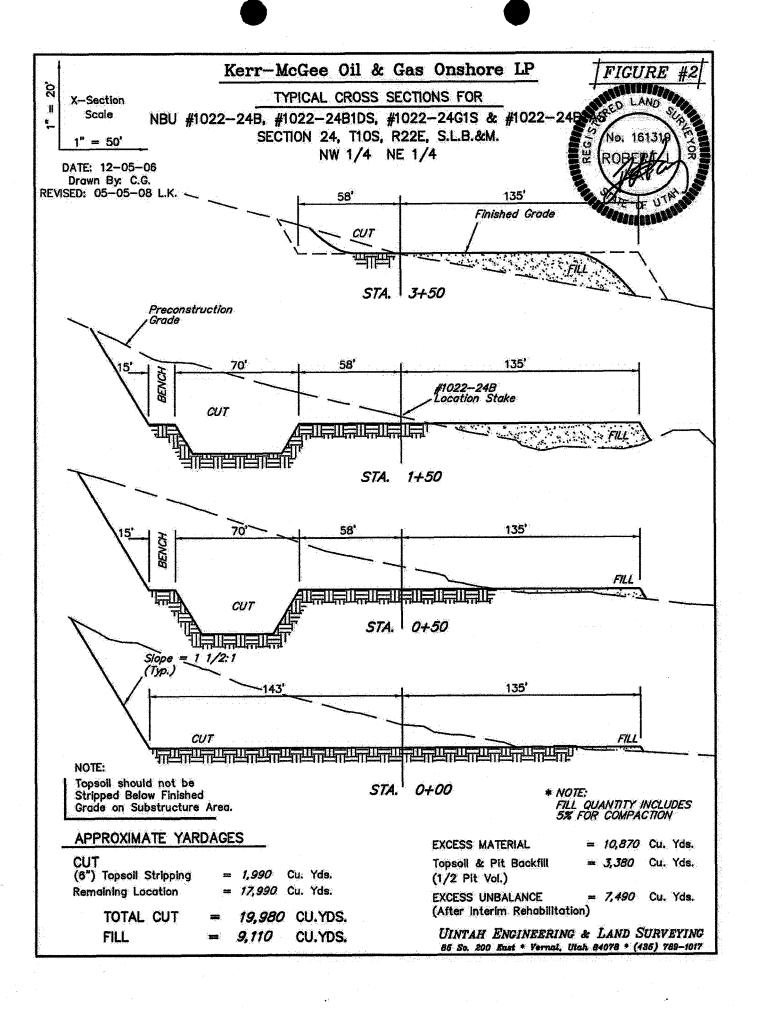
CAMERA ANGLE: WESTERLY

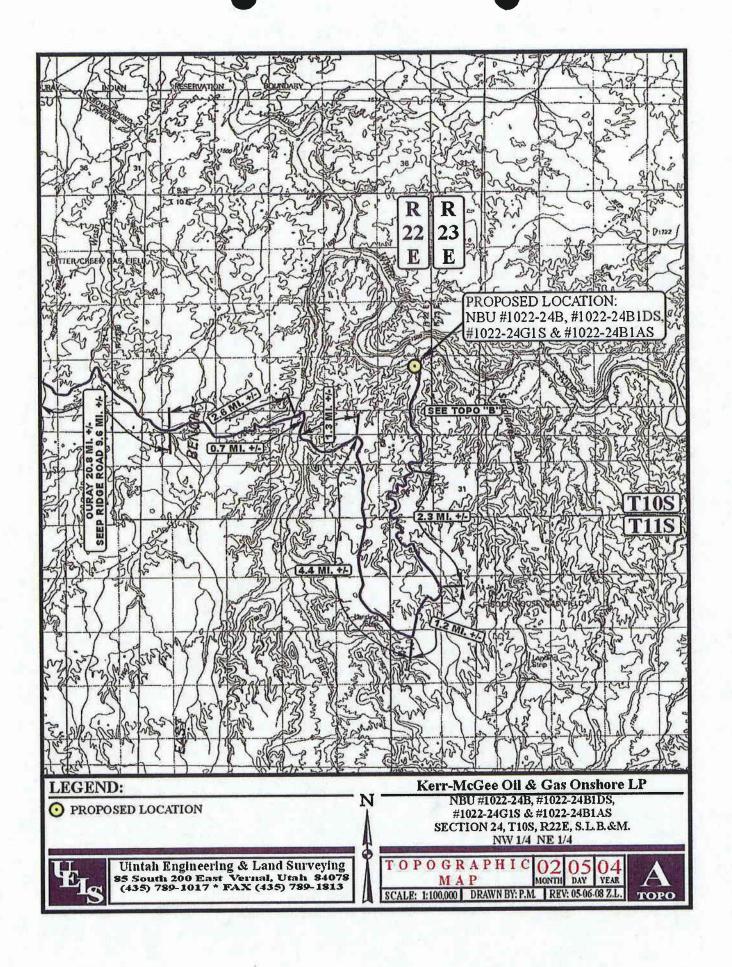


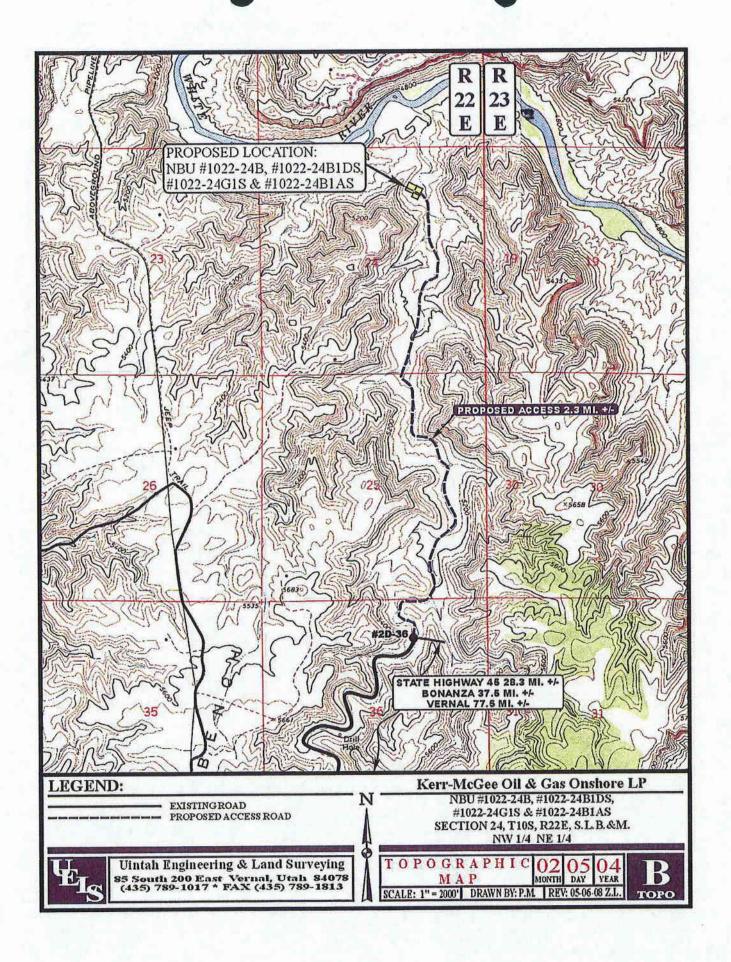
12 28 06 MONTH DAY YEAR

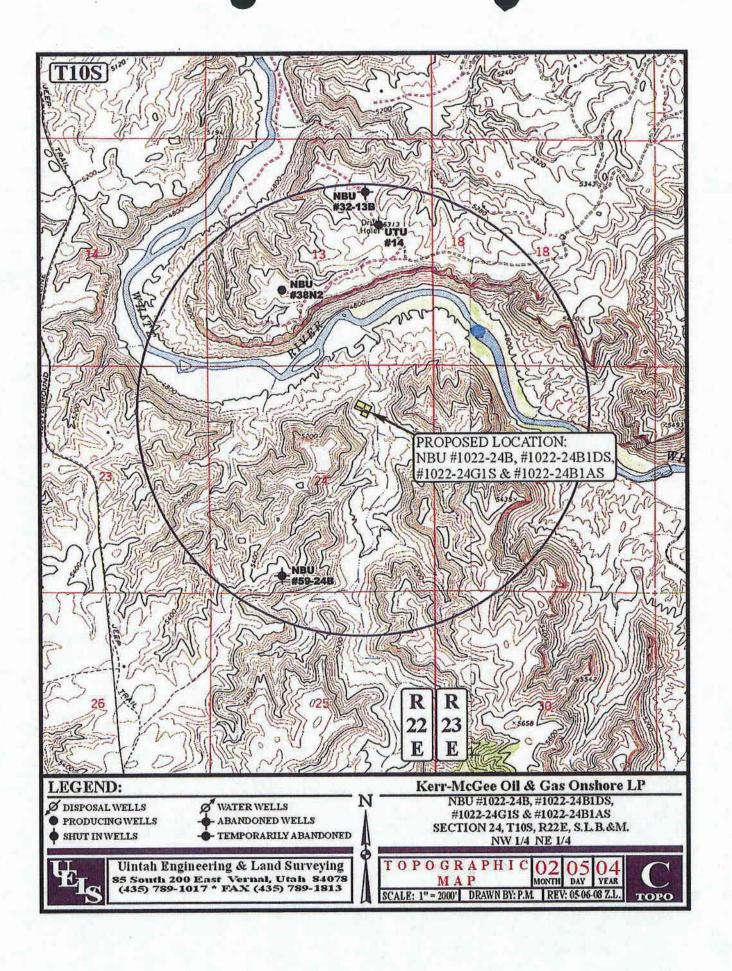
TAKEN BY: D.K. DRAWN BY: B.C. REV: 05-06-08 Z.L.

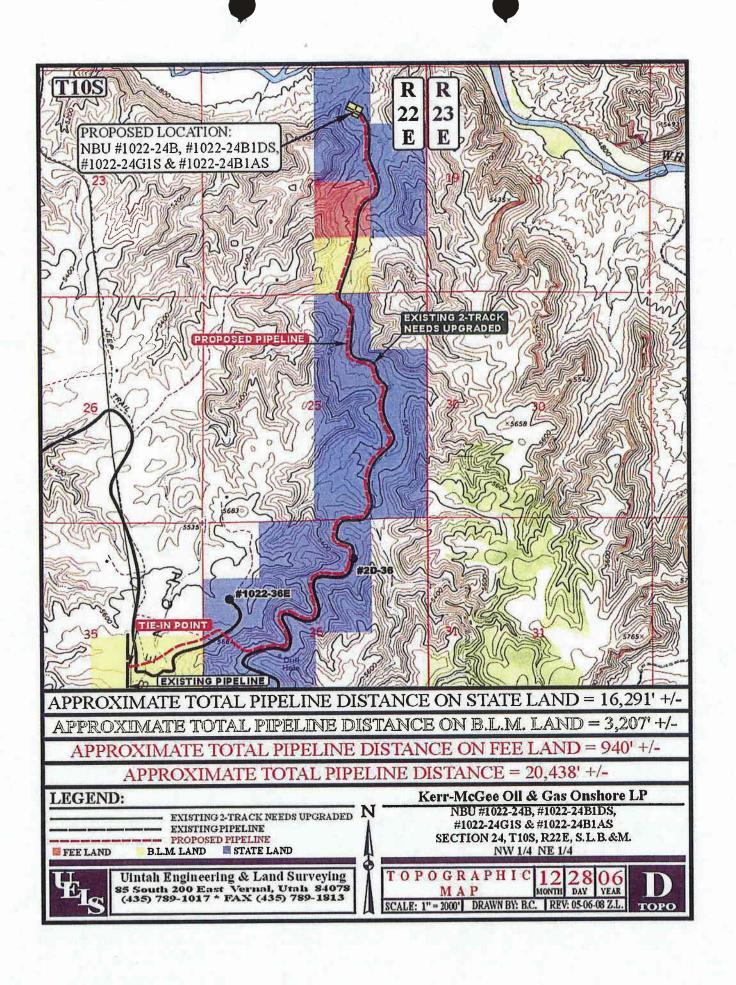


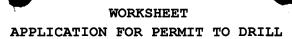




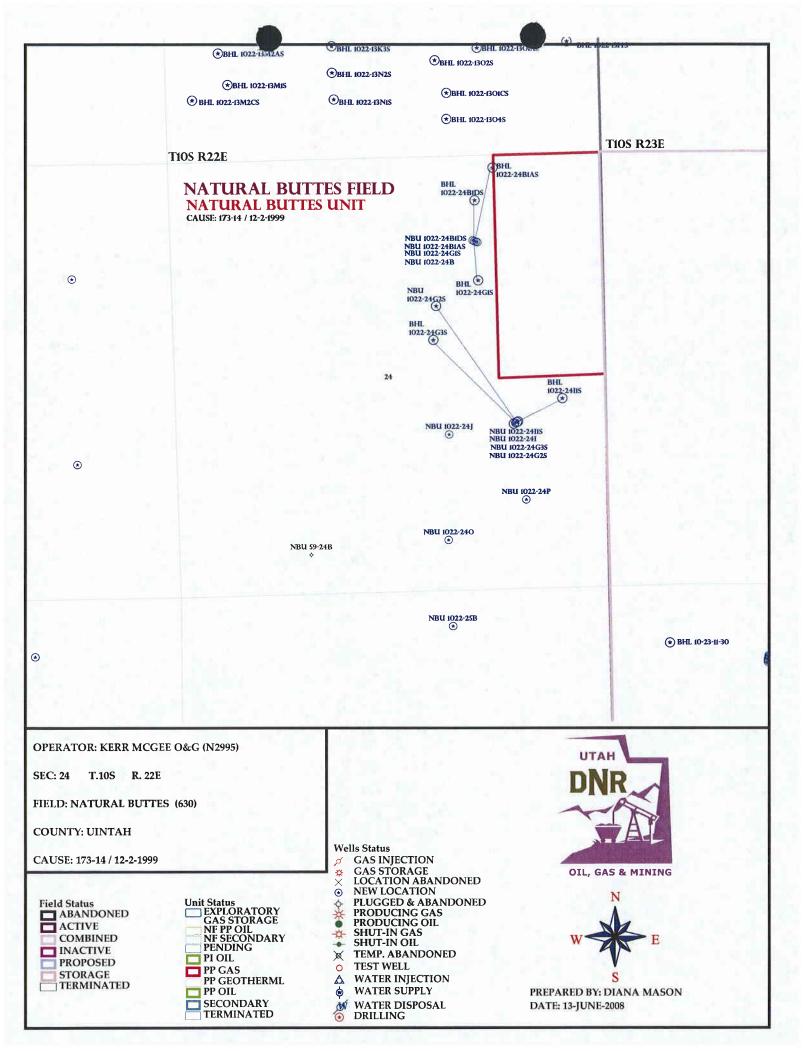








APD RECEIVED: 06/10/2008		API NO. ASSIG	NED: 43-04	7-40130	
WELL NAME: NBU 1022-24B1DS OPERATOR: KERR-MCGEE OIL & GAS (N2995)		PHONE NUMBER:	720-929 - 622	:6	
CONTACT: KEVIN MCINTURE					
PROPOSED LOCATION:		INSPECT LOCATN	BY: /	/	
NWNE 24 100S 220E SURFACE: 1026 FNL 1637 FEL		Tech Review	Initials	Date	
BOTTOM: 0540 FNL 1605 FEL		Engineering	DRD	9/16/08	
COUNTY: UINTAH LATITUDE: 39.93888 LONGITUDE: -109.3840		Geology		·	
UTM SURF EASTINGS: 638069 NORTHINGS: 44220	014	Surface	Surface		
LEASE TYPE: 3 - State LEASE NUMBER: ST ML 23610 SURFACE OWNER: 3 - State		PROPOSED FORMAT		IVD	
Plat Bond: Fed[] Ind[] Sta[] Fee[] (No. 22013542) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-8496) RDCC Review (Y/N) (Date:) MA Fee Surf Agreement (Y/N) Intent to Commingle (Y/N)	Unit:_ R S R P	_	tion 173-124	99 Coning. Thair	
COMMENTS:	Dunt (09-01-06)			
STIPULATIONS: 1- STATE 2-OIL	MENOT SHA	OF BASIS	>		



Application for Permit to Drill

Statement of Basis

9/8/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No

API WellNo

Status

Well Type

Surf Ownr

CBM

812

43-047-40130-00-00

GW

S

No

KERR-MCGEE OIL & GAS ONSHORE, L.P. Surface Owner-APD

Well Name NBU 1022-24B1DS

Field

UNDESIGNATED

Type of Work

Location

NWNE 24 10S 22E S 1026 FNL 1637 FEL GPS Coord (UTM) 638069E 4422014N

Geologic Statement of Basis

Kerr McGee proposes to set 1,500' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 5,000'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 24. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill

9/8/2008

APD Evaluator

Date / Time

Surface Statement of Basis

The general area is Archy Wash located south of the White River in Uintah County, Utah. Vernal, Utah is approximately 37 air miles to the northwest and Bonanza, Utah approximately 12 miles to the northeast. Archy Bench is approximately 1 mile to the west and West Fork of Saddle Tree Draw 1-2 miles to the east. The topography in the area is characterized by steep sidehills bordering winding narrow to moderately narrow draws. Many side-slopes are rimmed with sandstone bedrock forming vertical cliffs. Numerous small side draws lead away from the main divides. All drainages are ephemeral only flowing during winter snowmelt and following intense summer rainstorms. Roads are commonly constructed in the bottom of the washes and are subject to washing out following runoff events. Erosion from side-slopes is moderate. No streams seeps or springs are known to exist in the area.

The proposed NBU 1022-24B1DS gas well is approximately 79.8 road miles south of Ouray, Utah accessed by Uintah County roads to within approximately 100 feet of the site where a new road will be constructed to the location.

The location is in the bottom of Archy Wash on a northeast side-slope of a high near vertical ridge, which begins near the southeast corner of the location. Several washes intersect the location and are planned to be diverted around the southwest end. The White River is approximately 1/4 mile down drainage. The location was originally laid out for one well, the NBU 1022-24B well that has been approved. The proposed pad has been enlarged and three additional wells have been added.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA was invited to the pre-site investigation. He did not attend, as he had no concerns pertaining to the previously staked location. The selected location appears to be the best site for drilling and operating a well in the immediate area.

Ben Williams representing the UDWR attended the previous pre-site. He at that time stated the area is classified as yearlong critical habitat for antelope. He stated that the lack of water not forage is the limiting factor affecting the herd in the area. He recommended no restrictions for antelope. No other wildlife is expected to be significantly affected. He gave Jim Davis of SITLA and Carroll Estes of Kerr McGee a copy of his wildlife evaluation and a UDWR recommended seed mix to be used when re-vegetating the location.

Application for Permit to Drill Statement of Basis

9/8/2008

Utah Division of Oil, Gas and Mining

Page 2

Floyd Bartlett **Onsite Evaluator** 9/1/2008

Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 20-mils with a felt subliner shall be
	properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from leaving the pad

Utah Division of Oil, Gas and Mining

Operator

KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name

NBU 1022-24B1DS

API Number

43-047-40130-0

APD No 812

Field/Unit UNDESIGNATED

Location: 1/4,1/4 NWNE

Sec 24 Tw 10S

1026 FNL 1637 FEL

GPS Coord (UTM) 638073

4422011

Rng 22E Surface Owner

Participants

Floyd Bartlett, David Kay (Uintah Engineering and Land Surveying) and Rayleen White (Kerr McGee)

Regional/Local Setting & Topography

The general area is Archy Wash located south of the White River in Uintah County, Utah. Vernal, Utah is approximately 37 air miles to the northwest and Bonanza, Utah approximately 12 miles to the northeast. Archy Bench is approximately 1 mile to the west and West Fork of Saddle Tree Draw 1-2 miles to the east. The topography in the area is characterized by steep sidehills bordering winding narrow to moderately narrow draws. Many side-slopes are rimmed with sandstone bedrock forming vertical cliffs. Numerous small side draws lead away from the main divides. All drainages are ephemeral only flowing during winter snowmelt and following intense summer rainstorms. Roads are commonly constructed in the bottom of the washes and are subject to washing out following runoff events. Erosion from side-slopes is moderate. No streams seeps or springs are known to exist in the area.

The proposed NBU 1022-24B1DS gas well is approximately 79.8 road miles south of Ouray, Utah accessed by Uintah County roads to within approximately 100 feet of the site where a new road will be constructed to the location.

The location is in the bottom of Archy Wash on a northeast side-slope of a high near vertical ridge, which begins near the southeast corner of the location. Several washes intersect the location and are planned to be diverted around the southwest end. The White River is approximately 1/4 mile down drainage. The location was originally laid out for one well, the NBU 1022-24B well that has been approved. The proposed pad has been enlarged and three additional wells have been added.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing

Recreational

Wildlfe Habitat

New Road

Miles Well Pad

Src Const Material

Surface Formation

0.01

Width 305

Length 410

Onsite

UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Vegetation consists of big sagebrush, greasewood, spiny hopsage and broom snakeweed. Vegetation is sparse.

9/8/2008 Page 1

Antelope, rabbits, coyotes, and small mammals, birds and raptors.

Soil Type and Characteristics

Soils are moderately deep rocky sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required Y

Several washes intersect the location and are planned to be diverted around the southwest end.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run?

Paleo Potental Observed? N

Cultural Survey Run?

Cultural Resources?

Reserve Pit

Site-Specific Factors		Site I	Ranking		
Distance to Groundwater (feet)	100 to 200		5		
Distance to Surface Water (feet)	>1000		0		
Dist. Nearest Municipal Well (ft)	>5280		0		
Distance to Other Wells (feet)	<300		20		
Native Soil Type	Mod permeability		10		
Fluid Type	Fresh Water		5		
Drill Cuttings	Normal Rock		0		
Annual Precipitation (inches)	<10		0		•
Affected Populations	<10		0		
Presence Nearby Utility Conduits	Not Present		0		
		Final Score	40	1	Sensitivity Level

Characteristics / Requirements

The proposed reserve pit is 100' x 250' x 10' deep located in a cut on the southeast corner of the location. A 20 mil liner with a felt sub-liner is planned by Kerr McGee.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 20 Pit Underlayment Required? Y

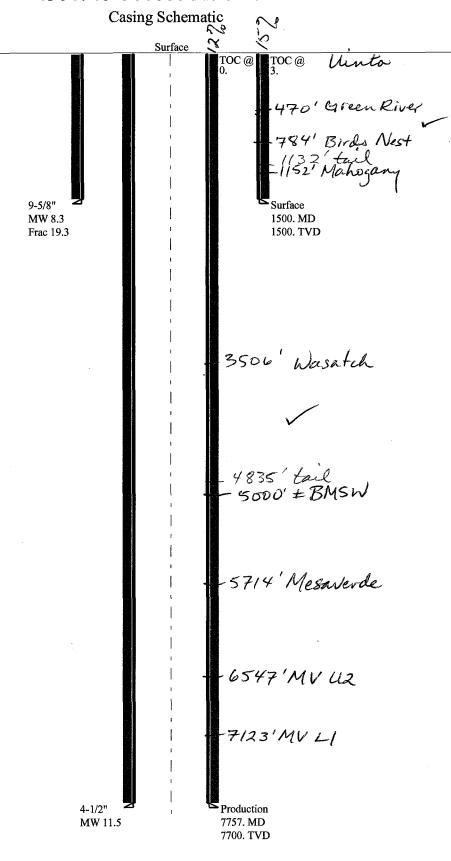
Other Observations / Comments

Floyd Bartlett **Evaluator**

9/1/2008

Date / Time

43047401300000 NBU 1022-24B1DS



Well name:

43047401300000 NBU 1022-24B1DS

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Surface

Project ID:

43-047-40130-0000

Location:

Uintah County, Utah

Design parameters: Collapse

Mud weight:

8.330 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor

1.125

1.00

Environment:

H2S considered? No 75 °F Surface temperature: Bottom hole temperature: 96 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,300 ft

Burst:

Design factor

Cement top:

3 ft

1,500 psi

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

1,320 psi 0.120 psi/ft 1,500 psi

No backup mud specified.

Tension:

1.80 (J) 8 Round STC: 8 Round LTC: 1.80 (J) 1.60 (J) **Buttress:**

1.50 (J) Premium: Body yield: 1.50 (B)

Tension is based on buoyed weight. 1,315 ft Neutral point:

Completion type is subs Non-directional string.

Re subsequent strings:

Injection pressure:

Next setting depth: 7,700 ft Next mud weight: 11.500 ppg Next setting BHP: 4,600 psi Fracture mud wt: 19.250 ppg 1,500 ft Fracture depth:

True Vert Nominal End Measured Drift Internal Segment Run Weight **Finish Depth** Depth Diameter Capacity Length Size Grade Seq (ft³) (lbs/ft) (ft) (ft) (in) (ft) (in) 1500 1500 8.796 651.1 1 1500 9.625 36.00 J-55 LT&C **Tension Tension** Tension Collapse Collapse Collapse **Burst Burst Burst** Run Strength Design Load Strenath Design Load Strength Design Load Seq (Kips) (psi) **Factor** (Kips) **Factor** (psi) Factor (psi) (psi) 9.57 J 1 2020 3.112 1500 3520 2.35 47 453 649

Prepared by: Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: (801) 538-5357 FAX: (801) 359-3940

Date: September 15,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of blaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43047401300000 NBU 1022-24B1DS

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Production

Project ID:

43-047-40130-0000

Location:

Uintah County, Utah

Environment:

Design parameters: Collapse

Mud weight:

Internal fluid density:

11.500 ppg 2.330 ppg Minimum design factors: Collapse:

Design factor

1.125

H2S considered?

No Surface temperature: 75 °F Bottom hole temperature: 183 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00 Cement top: Surface

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

2,906 psi 0.220 psi/ft 4,600 psi

No backup mud specified.

Tension: 8 Round STC:

1.80 (J) 8 Round LTC: 1.80 (J) 1.60 (J) **Buttress:** 1.50 (J) Premium:

Body yield:

1.50 (B)

Tension is based on buoyed weight. Neutral point: 6,433 ft

Completion type is subs

Directional well information:

Kick-off point 1560 ft Departure at shoe: 487 ft

3 °/100ft Maximum dogleg: 0 ° Inclination at shoe:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	7757	4.5	11.60	I-80	LT&C	7700	7757	3.875	676.9
Run Seq	Collapse Load (psi) 3668	Collapse Strength (psi) 6360	Collapse Design Factor 1.734	Burst Load (psi) 4600	Burst Strength (psi) 7780	Burst Design Factor 1.69	Tension Load (Kips) 74	Tension Strength (Kips) 212	Tension Design Factor 2.87 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: (801) 538-5357 FAX: (801) 359-3940

Date: September 15,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7700 ft, a mud weight of 11.5 ppg. An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

BOPE REVIEW

Kerr-McGee NBU 1022-24B1DS API 43-047-40130-0000

INPUT				
Well Name	Kerr-McGee NBU 10)22-24B1DS API 43	3-047-40130-	0000
	String 1	String 2		
Casing Size (")	9 5/8	4 1/2		
Setting Depth (TVD)	1500	7700		
Previous Shoe Setting Depth (TVD)	20	1500		
Max Mud Weight (ppg)	8.4	11.5		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3520	7780		14
Operators Max Anticipated Pressure (psi)	4809	12.0	ppg 🗸	1

Calculations	String 1	9 5/8	10		
Max BHP [psi]	.052*Setting Depth*MW =	655			
			BOPE Ad	equate	For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	475	Y	ES 🛩	Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	325	Y	ES	
	· · · · · · · · · · · · · · · · · · ·	·	*Can Full	Expect	ted Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	330	E 1	10 /4	easonable Depth
Required Casing/BOPE Test	Pressure	1500	psi /		
*Max Pressure Allowed @ P	revious Casing Shoe =	20	psi > /		*Assumes 1psi/ft frac gradient
				· · · · · · · · · · · · · · · · · · ·	

Calculations	String 2	4 1/2	1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	4605	05	
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3681	81 YES V	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2911	11 YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	3241	41 (NO Keasonable	
Required Casing/BOPE Test	Pressure	5000	000 psi /,	
*Max Pressure Allowed @ Pi	revious Casing Shoe =	1500	*Assumes 1psi/ft frac gradient	

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

June 16, 2008

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API# WELL NAME (Proposed PZ MesaVerde)

LOCATION

43-047-40136 NBU 921-20IT Sec 20 T09S R21E 1902 FSL 0822 FEL 43-047-40135 NBU 921-15MT Sec 15 T09S R21E 0697 FSL 0406 FWL 43-047-40134 NBU 922-31GT Sec 31 T09S R22E 1664 FNL 1349 FEL

43-047-40133 NBU 922-32CT Sec 32 T09S R22E 0809 FNL 2154 FWL

(Proposed PZ Wasatch/MesaVerde)

43-047-40129 NBU 1022-24B1AS Sec 24 T10S R22E 1052 FNL 1583 FEL BHL Sec 24 T10S R22E 0150 FNL 1375 FEL

43-047-40130 NBU 1022-24B1DS Sec 24 T10S R22E 1026 FNL 1637 FEL BHL Sec 24 T10S R22E 0540 FNL 1605 FEL

43-047-40131 NBU 1022-24G1S Sec 24 T10S R22E 1044 FNL 1601 FEL

BHL Sec 24 T10S R22E 1515 FNL 1580 FEL

43-047-40141 NBU 1022-24I1S Sec 24 T10S R22E 2062 FSL 1130 FEL BHL Sec 24 T10S R22E 2330 FSL 0585 FEL

43-047-40142 NBU 1022-24G3S Sec 24 T10S R22E 2037 FSL 1184 FEL

BHL Sec 24 T10S R22E 2225 FNL 2140 FEL

43-047-40140 NBU 1022-24G2S Sec 24 T10S R22E 2053 FSL 1148 FEL

BHL Sec 24 T10S R22E 1815 FNL 2100 FEL

Our records indicate the 1022-24B1AS, 1022-24B1DS, 1022-24G1S and the 1022-24I1 bottom hole location is closer than 460 feet from the Natural Buttes Unit boundary.

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:6-16-08



Kerr-McGee Oil & Gas Onshore LP 1099 18 STREET, SUITE 1200 DENVER, CO 80202

June 16, 2008

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE:

NBU 1022-24B1DS

T10S-24E

Section 24: NWNE 540' FNL, 1605' FEL Uintah County, Utah

Dear Mrs. Mason:

Kerr-McGee Oil & Gas Onshore LP has submitted a permit to drill the captioned well to test the Wasatch and Mesaverde formations. The well is located at an exception location to Spacing Order 173-14. The well location was moved for topographic reasons. Kerr-McGee owns 100% of the leasehold within 460 feet of the exception location of the offset lands and has no objection to the exception location.

Kerr-McGee requests your approval of this exception location. If you have any questions, call me at 720-929-6262. Thank you for your assistance.

Sincerely,

Jason Rayburn Landman

JUN 2 4 2008

DIV. OF OIL, GAS & MINING

From:

Jim Davis

To:

Bonner, Ed; Mason, Diana

Date:

1/28/2009 10:59 AM

Subject:

APD approvals- A bunch of Kerr McGee

CC:

Garrison, LaVonne; Raleen.White@anadarko.com The following wells have been approved by SITLA including arch and paleo clearance.

Condition of approval: Spot-checking of pad construction/ extension for paleo resources:

NBU 1022-24B1AS 4304740129 4304740130 NBU 1022-24B1DS 4304740131 NBU 1022-24G1S and

NBU 1022-25J3S 4304750070 NBU 1022-25J1S 4304750069 NBU 1022-2502S 4304750071

No COA's:

NBU 1022-24G2S 4304740140 NBU 1022-24G3S 4304740142 NBU 1022-241IS 4304740141

FYI: These wells had been approved by SITLA previously. The APDs have been extended. Kerr McGee recently sent paleo reports to SITLA- there were no recommendations from the surveying paleontologist. Just in case anyone needs it, SITLA (still) approves of these APDs.

NBU 1022-25G 4304739142 NBU 1022-25G3S 4304740443 NBU 1022-25G4S 4304740442 4304740441 NBU 1022-25G2S

Jim Davis **Utah Trust Lands Administration** jimdavis1@utah.gov Phone: (801) 538-5156



Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

January 28, 2009

Kerr-McGee Oil & Gas Onshore, LP P O Box 173779 Denver, CO 80217-3779

Re:

NBU 1022-24B1DS Well, 1026' FNL, 1637' FEL, NW NE, Sec. 24, T. 10 South,

R. 22 East, Bottom Location 540' FNL, 1605' FEL, NW NE, Sec. 24, T. 10 South,

R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40130.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc: Uintah County Assessor

SITLA

Bureau of Land Management, Vernal Office



Operator:	Kerr-McGee Oil & Gas Onshore, LP						
Well Name & Numl	ber	NBU 10	NBU 1022-24B1DS				
API Number:		43-047-	40130				
Lease:	ST ML 23610						
Location:	NW NE	Sec. 24	T. 10 South	R. <u>22 East</u>			
Bottom Location:	NW NE	Sec. 24	T. 10 South	R. 22 East			

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home

• Carol Daniels at: (801) 538-5284 office

• Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-047-40130 January 28, 2009

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
- 7. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 23610
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for propos bottom-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-24B1DS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI	HORE, L.P.		9. API NUMBER: 43047401300000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1026 FNL 1637 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NWNE Section: 24	P, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH
11.	CK APPROPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & Ga extension to this A	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE □ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION MAPLETED OPERATIONS. Clearly show all per as Onshore, L.P. (Kerr-McGee) PD for the maximum time allowith any questions and/or con) respectfully requests an owed. Please contact the nments. Thank you.	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER: Olumes, etc. Approved by the Utah Division of Oil, Gas and Mining ate: January 25, 2010 y:
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER	TITLE Regulatory Analyst	
SIGNATURE N/A	720 929-6156	DATE 1/25/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047401300000

API: 43047401300000 Well Name: NBU 1022-24B1DS

Location: 1026 FNL 1637 FEL QTR NWNE SEC 24 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 1/28/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not requ

uire revi	sion. Following is a checklist of	some items related to the applicati	on, which should be verified.
	ated on private land, has the ow red? 💮 Yes 📵 No	nership changed, if so, has the sur	face agreement been
	any wells been drilled in the vicing requirements for this location?	inity of the proposed well which we	ould affect the spacing or
	here been any unit or other agre s proposed well? 🦳 Yes 🍺 I	ements put in place that could affe	ect the permitting or operation
	there been any changes to the at the proposed location?	ccess route including ownership, o s 📵 No	or rightof- way, which could
• Has tl	he approved source of water for	drilling changed? 📗 Yes 📵 No	o
		s to the surface location or access seed at the onsite evaluation?	
• Is boı	nding still in place, which covers	this proposed well? 📵 Yes 🗍	Approved by the No Utah Division of Oil, Gas and Mining
	Danielle Piernot Date		
Title:	Regulatory Analyst Representing	: KERR-MCGEE OIL & GAS ONSHOR	te: January 25, 2010
			F 5 1 1/1/1

Sig

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	G	5.LEASE DESIGNATION AND SERIAL NUMBER: ST ML 23610
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3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE N treet, Suite 600, Denver, CO, 80217 3779	1UMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1026 FNL 1637 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: - Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & G extension to this A	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF	espectfully requests an ed. Please contact the ents. Thank you.	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION WATER DISPOSAL ✓ APD EXTENSION OTHER: Olumes, etc. Approved by the Utah Division of Oil, Gas and Mining 02/03/2011 y:
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 1/28/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047401300000

API: 43047401300000 **Well Name:** NBU 1022-24B1DS

Location: 1026 FNL 1637 FEL QTR NWNE SEC 24 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 1/28/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

uire revision. Following is a checklist of some items related to the application, which should be verified.
 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? 🔘 Yes 📵 No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Danielle Piernot Date: 1/28/2011

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 10, 2012

Kerr McGee Oil & Gas Onshore, L.P. P.O. Box 173779 Denver, CO 80217

Re:

APD Rescinded - NBU 1022-24B1DS, Sec. 24, T. 10S, R. 22E

Uintah County, Utah API No. 43-047-40130

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 28, 2009. On January 25, 2010 and February 3, 2011 the Division granted a one-year APD extension. On February 10, 2012, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 10, 2012.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Me and Me lason

Environmental Scientist

cc: Well File

SITLA, Ed Bonner

